

# **Environmental Audits for Sustainable Tourism(EAST)**

**-Case Study-**

*Presented by:*

Bill Meade

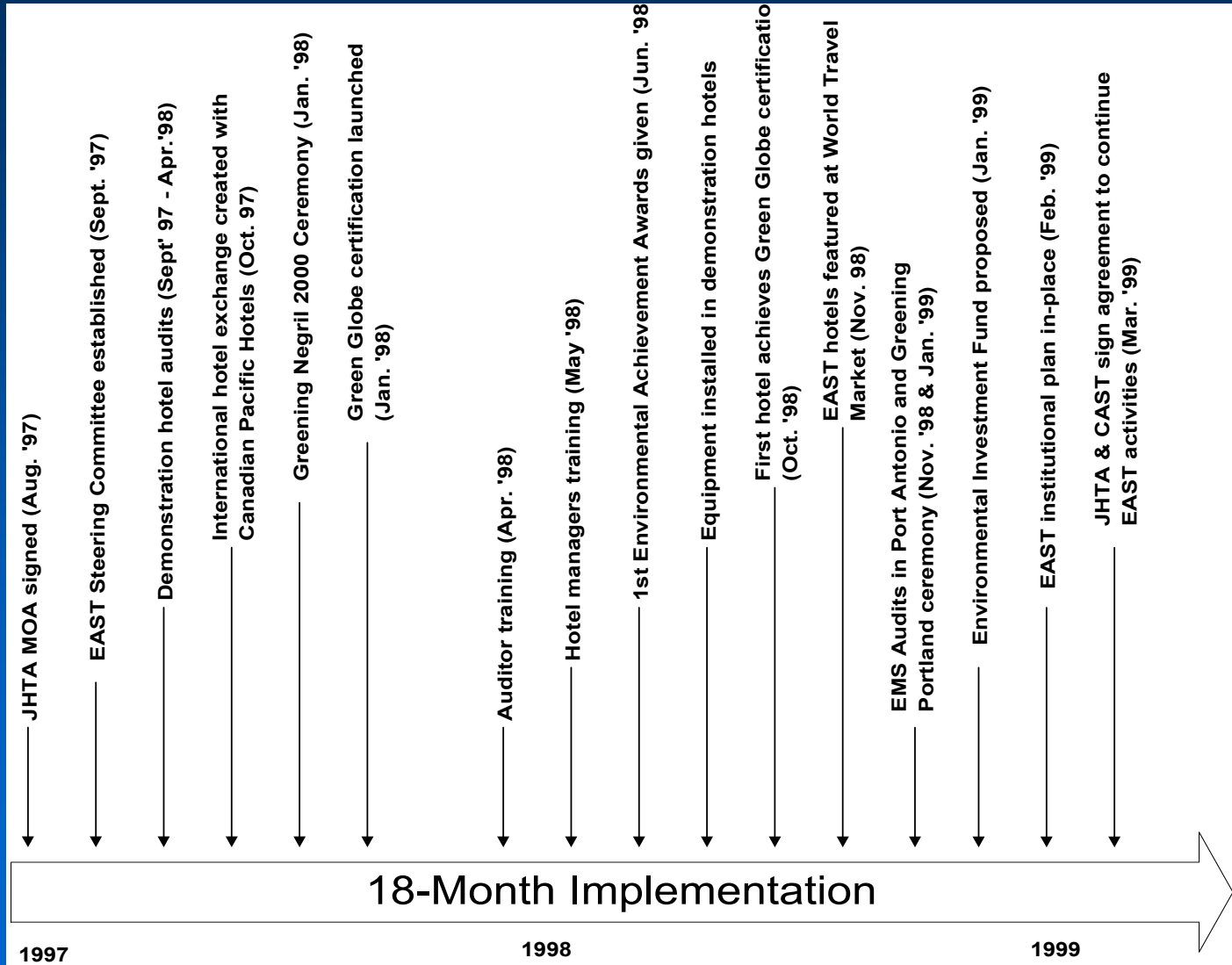
Hagler Bailly, Inc.

Dominica, December 3-5, 1998

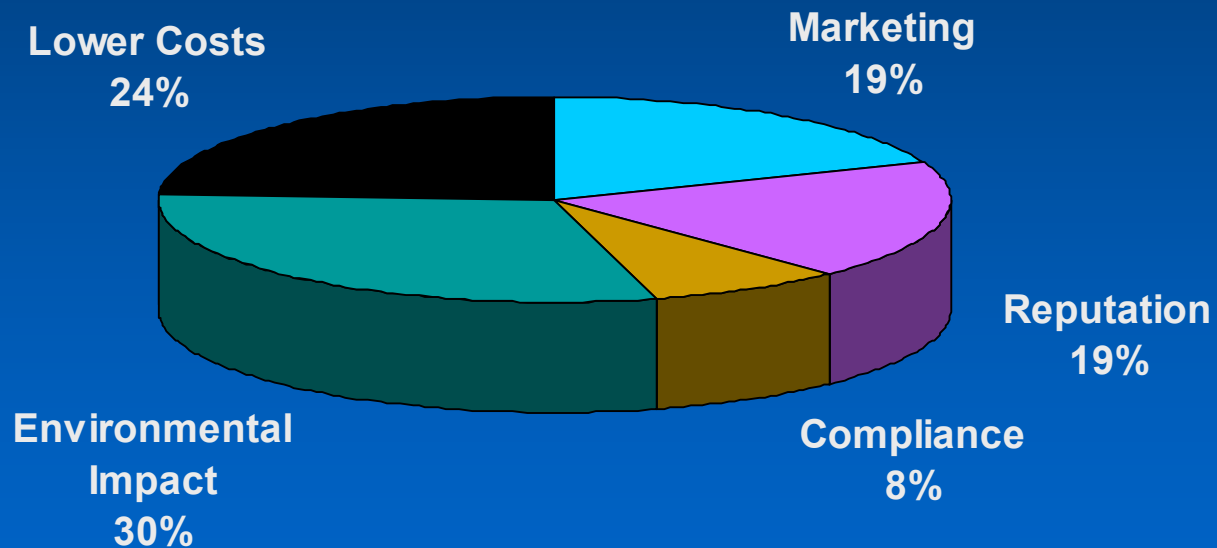
# Overview of EAST

- ◆ Funded by USAID/Jamaica
- ◆ Implemented through the Jamaica Hotel and Tourist Association
- ◆ Training, audits, certification, awareness, promotion, equipment demonstration, monitoring
- ◆ Targeting small hotels (<100 rooms)
- ◆ Phase I - Demonstration (13 months)
- ◆ Phase II - Institutionalization (6 months)
- ◆ Hagler Bailly serving as technical contractor

# EAST Activities (1997-1999)

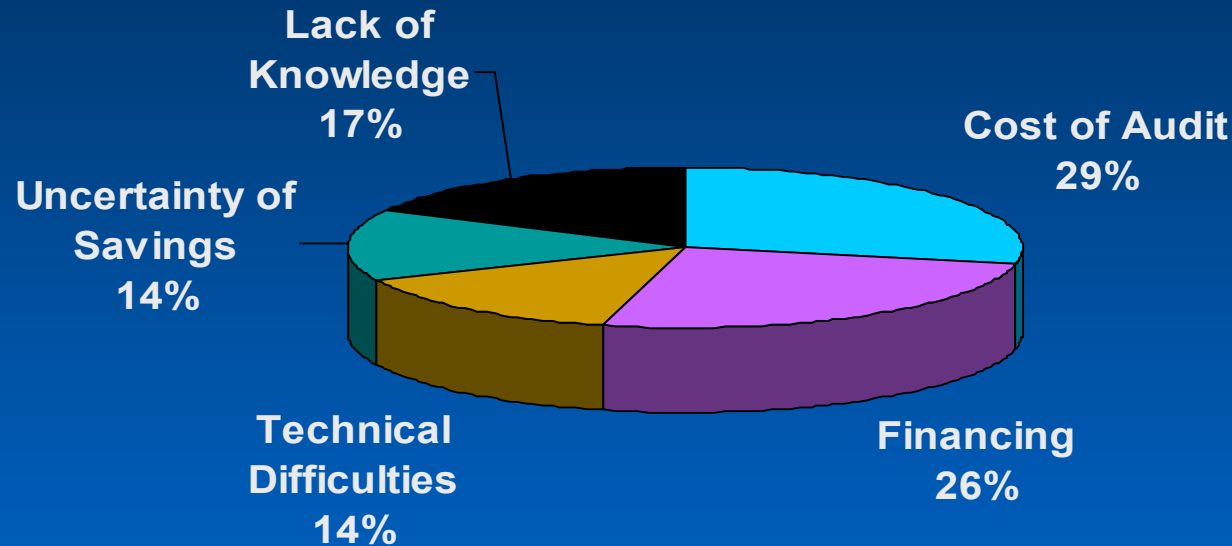


# Top Reasons Why Hotels Choose to be “Environmentally Friendly”



**Source:** EAST survey of Negril Hotels, 1997

# Top Perceived Barriers to Becoming “Environmentally Friendly”



Source: EAST survey of 17 Negril Hotels, 1997

# EAST Environmental Management Audits

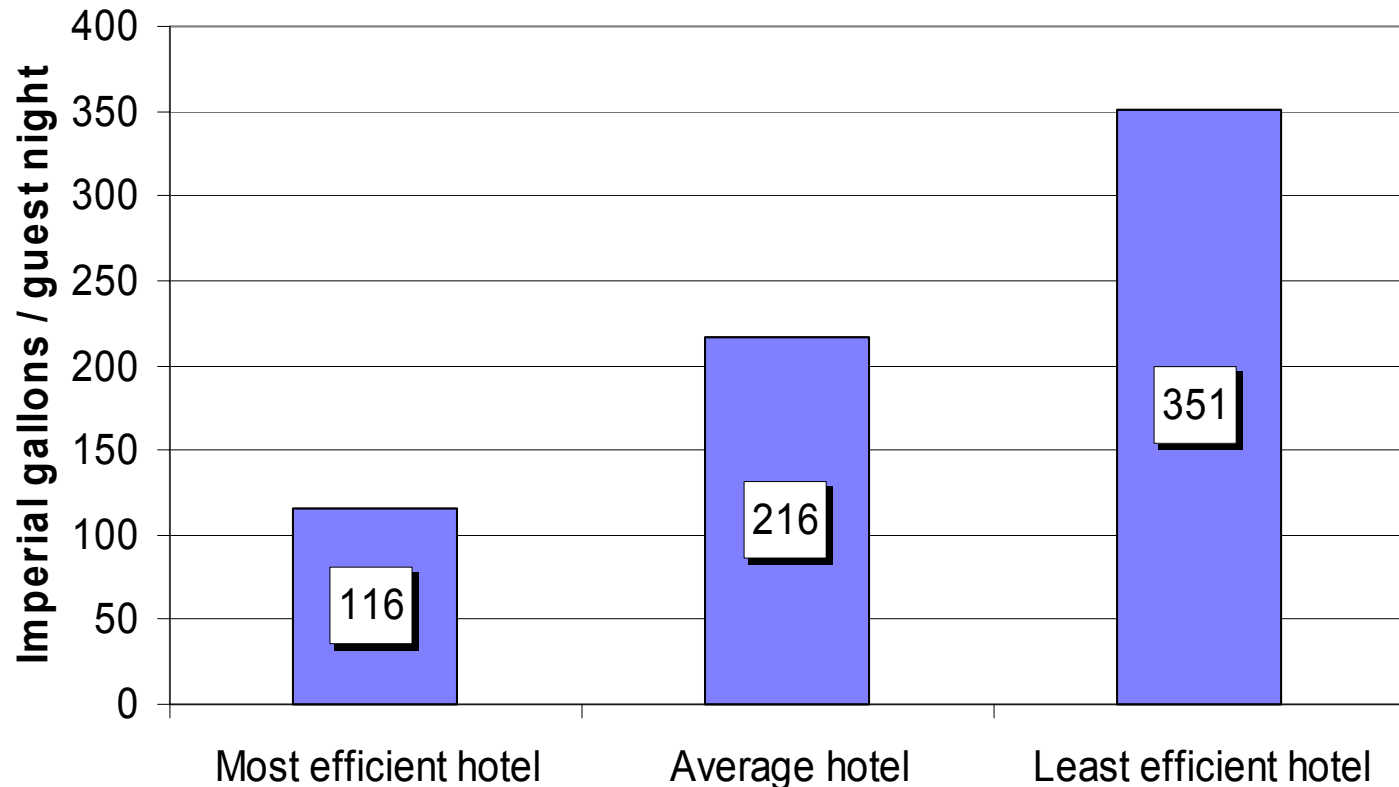
- ◆ The EAST project audited 20 Jamaican hotels. Property size ranged from 15 to 200 rooms.
- ◆ Audits focused on:
  - ✓ energy use
  - ✓ water use
  - ✓ wastewater generation
  - ✓ solid waste generation
  - ✓ use of chemicals
  - ✓ management and staff practices

# EAST Audits - General Findings

- ◆ Inefficient use of water
- ◆ Inefficient use of energy
- ◆ Excessive and unnecessary use of chemicals
- ◆ Excessive solid waste generation
- ◆ Staff operating procedures are not followed or enforced
- ◆ Poor (or no) monitoring

# EAST Audits - General Findings

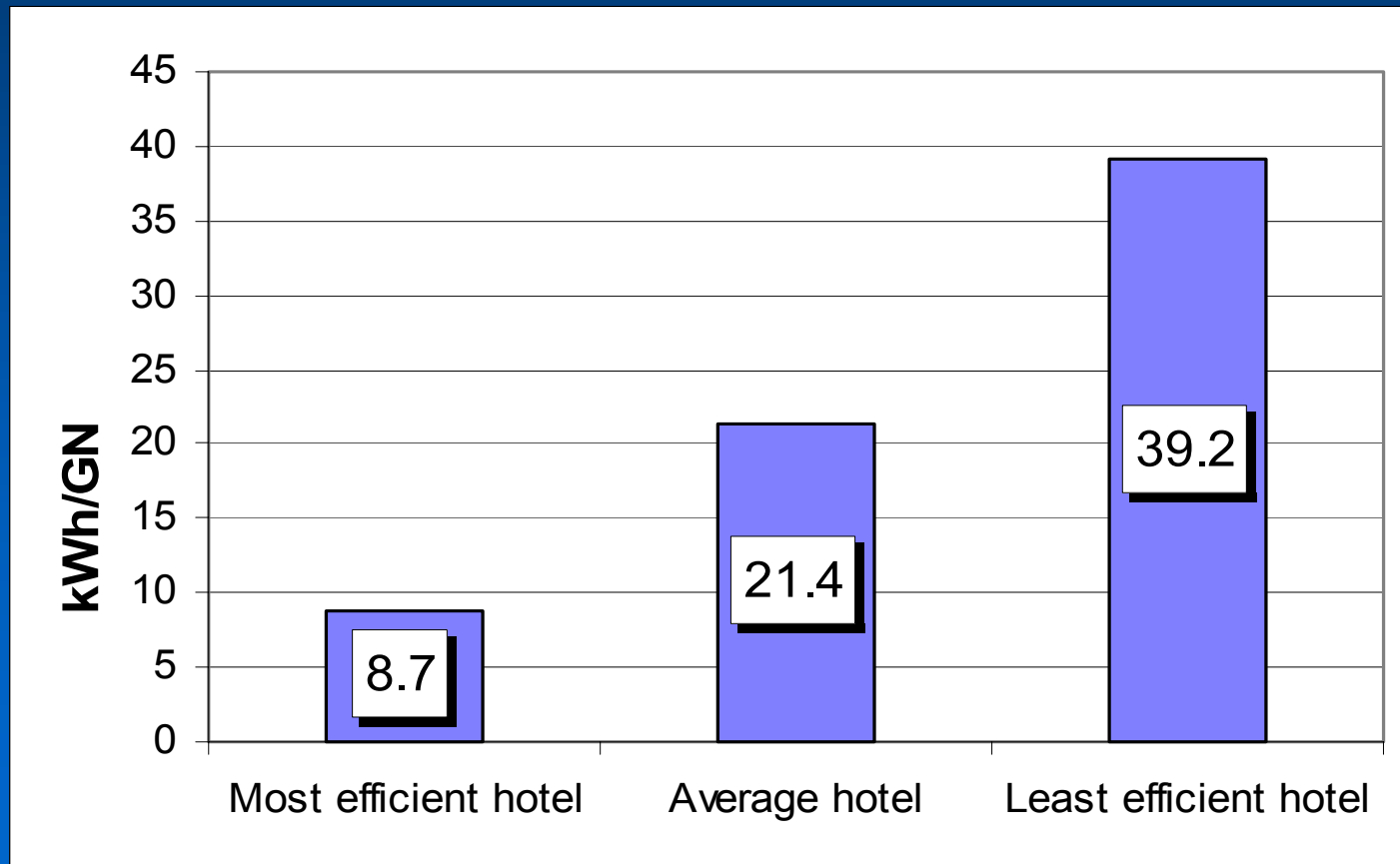
- ◆ Water use in properties audited by EAST
  - ✓ Property size ranges from 15 to 70 rooms





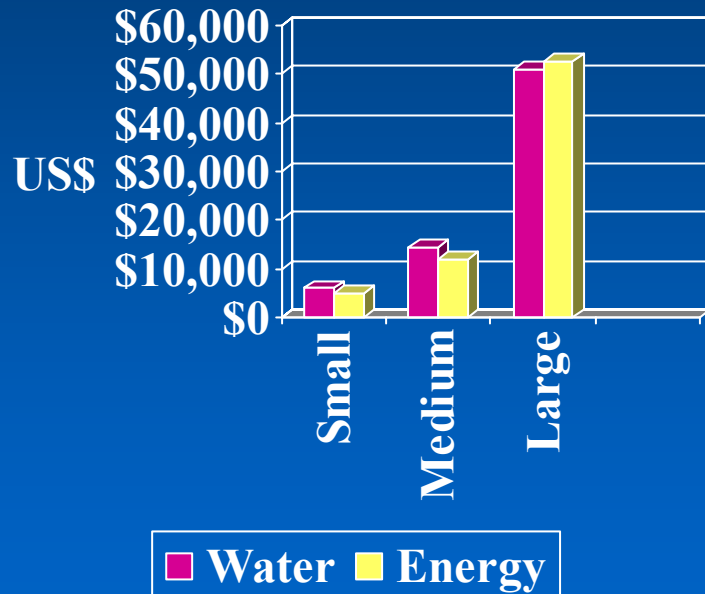
# EAST Audits - General Findings

- ◆ Electricity use in properties audited by EAST
  - ✓ Property size ranges from 15 to 70 rooms



# EAST Audits - Potential Savings

## Estimated Annual Savings



### Small Hotels

- ◆ Less than 30 rooms
- ◆ Average size = 20 rooms

### Medium Hotels

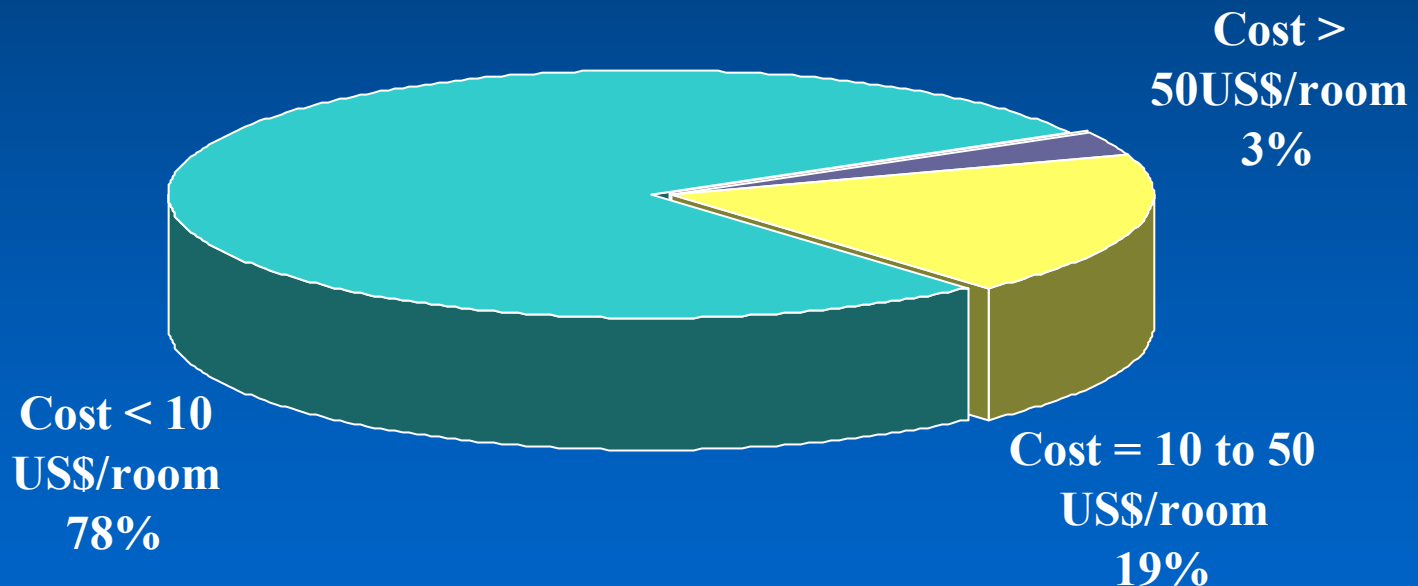
- ◆ 30 to 100 rooms
- ◆ Average size = 48 rooms

### Large Hotels\*

- ◆ Greater than 100 rooms
- ◆ Average size = 194 rooms
- ◆ Includes audits performed outside EAST

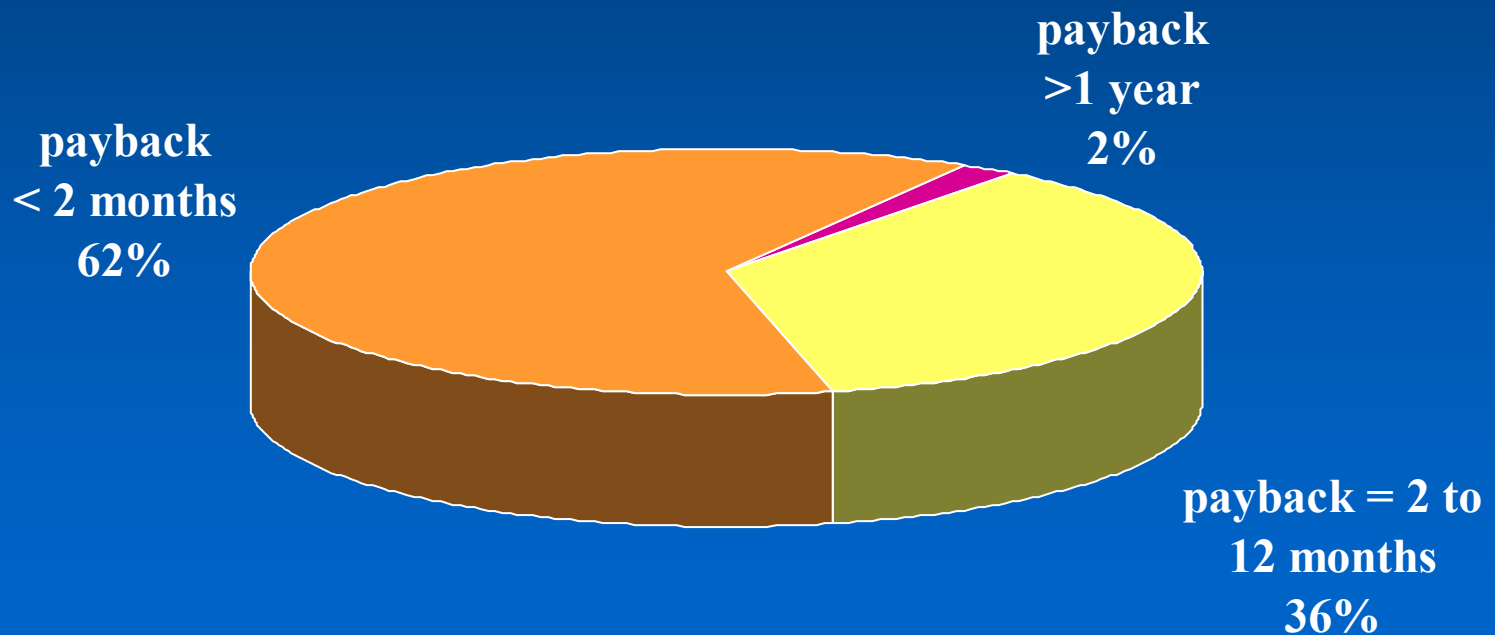
# Summary of EAST Audit Results for an Average Jamaican Hotel

## Breakdown of recommendations by implementation cost



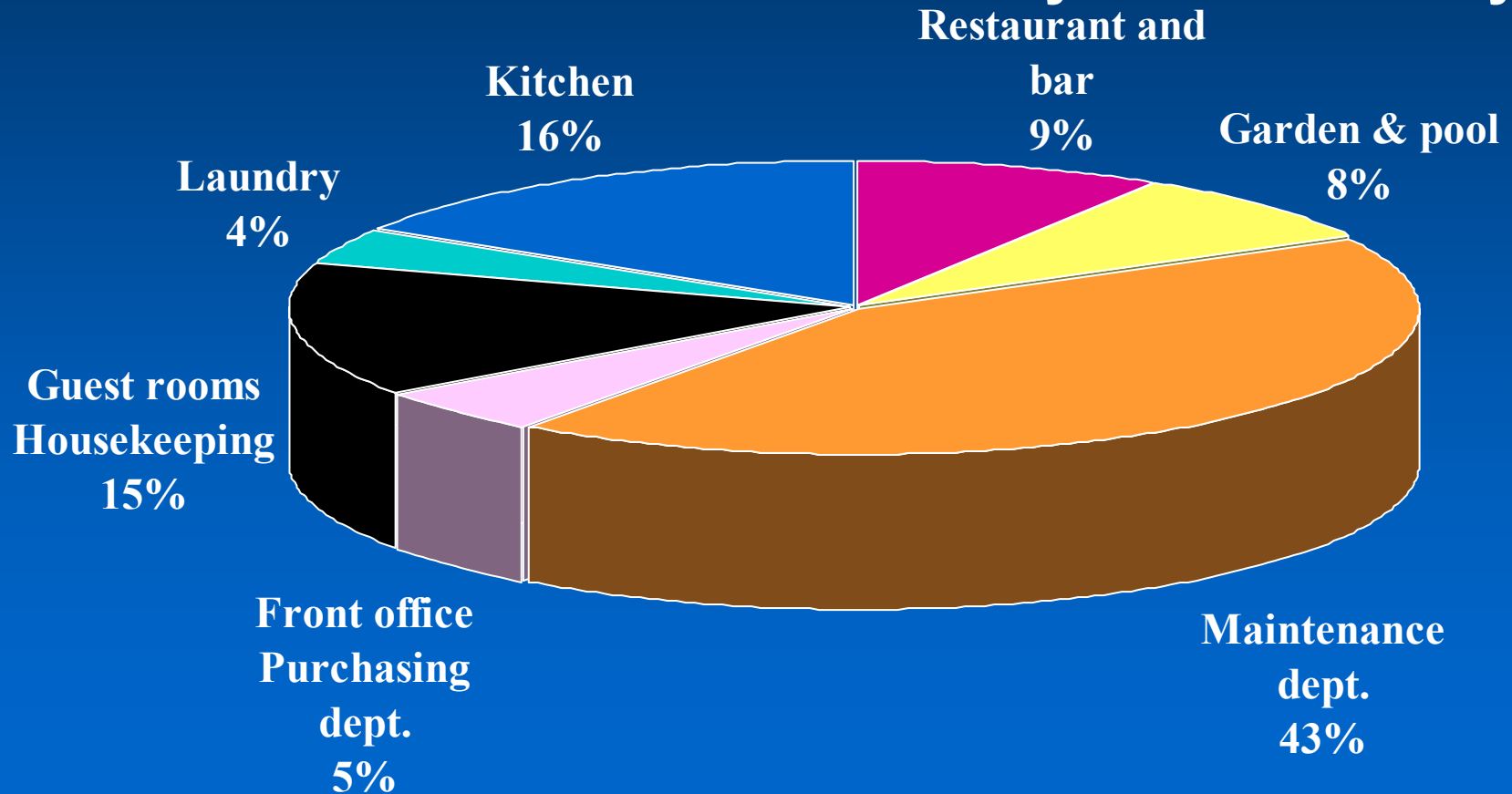
# Summary of EAST Audit Results for an Average Jamaican Hotel

## Breakdown of recommendations by payback period



# Summary of EAST Audit Results for an Average Jamaican Hotel

## Breakdown of recommendations by area of activity



# What is Needed to Improve Performance?

- ◆ Most recommendations made by EAST
  - ✓ have low implementation costs
  - ✓ have rapid payback periods
  - ✓ are relatively simple and easy to implement
- ◆ Greatest environmental and financial benefits can be achieved by improving
  - ✓ frequent monitoring
  - ✓ management supervision
  - ✓ staff practices and training
  - ✓ preventative and routine maintenance

# **Hotel Environmental Management System (EMS)**

- **An EMS is a comprehensive organizational approach designed to achieve environmental care in all aspects of operations.**
- **An effective EMS can help a hotel:**
  - **assure guests of commitment to environmental management**
  - **set and achieve environmental objectives**
  - **enhance image and market share**
  - **improve efficiency and reduce costs**

# Hotel EMS

- Few hotels in Jamaica currently have EMSs
- Growing demand for EMSs
  - ISO 14000
  - Green Globe - EMS adapted to the hotel industry
- In the future, EMS evaluations will become part of comprehensive hotel audits
- The principal components of EMS (Green Globe)
  - environmental policy
  - planning
  - implementation
  - corrective action
  - review



# EMS and Environmental Programs

## ◆ Environmental Management System

- ✓ Assessment
- ✓ Objectives and targets
- ✓ Division of responsibility
- ✓ Monitoring results

## ◆ Environmental Programs

- ✓ Environmental problem (e.g., solid waste)
- ✓ Department initiative (e.g., linen reuse)
- ✓ Multi-property involvement (e.g., glass recycling)

# Benefits of Green Globe EMS

- ◆ Requires 3rd-party verification
- ◆ Reinforces compliance with all legal requirements
- ◆ Includes environmental, cultural and social criteria (Agenda 21)
- ◆ Voluntary approach signifies pro-active management
- ◆ Provides framework for implementation of management and technical audit recommendations
- ◆ Monitors improvements against pre-defined targets
- ◆ Recognized certification in international marketplace

# Green Globe Certification in Jamaica (as of Nov. 98)

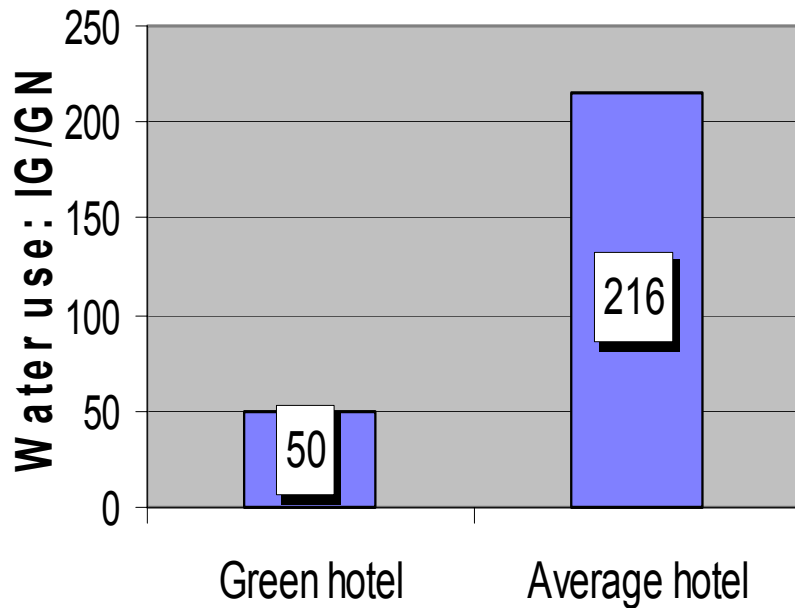
- ◆ 15 hotels audited as demonstration
- ◆ 4 hotels received Green Globe certificate\*
- ◆ 4 hotels received Statement of Intent
- ◆ 11 hotels registered for certification\*

\* – Includes large hotels that did not qualify for EAST, and small hotels audited under EAST.

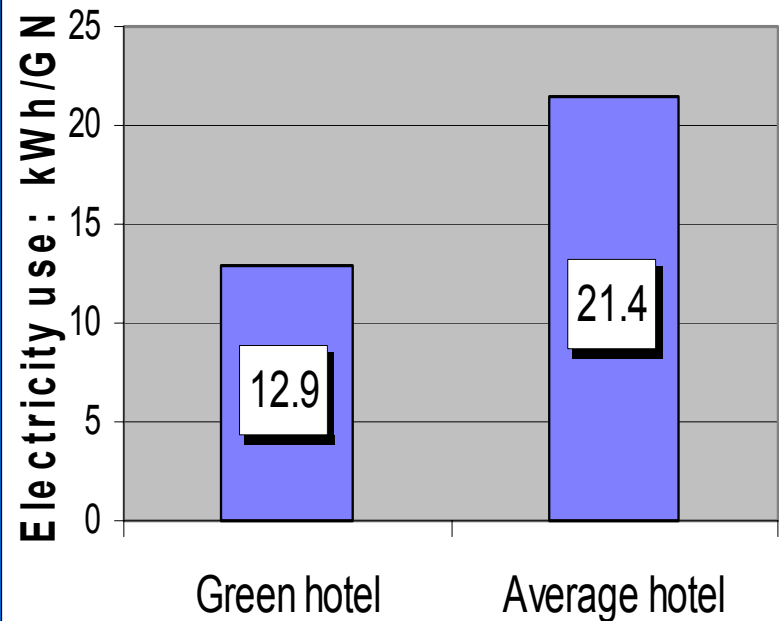
# Performance of a Green Hotel

## ◆ Utility use: Green vs. average Jamaican hotel

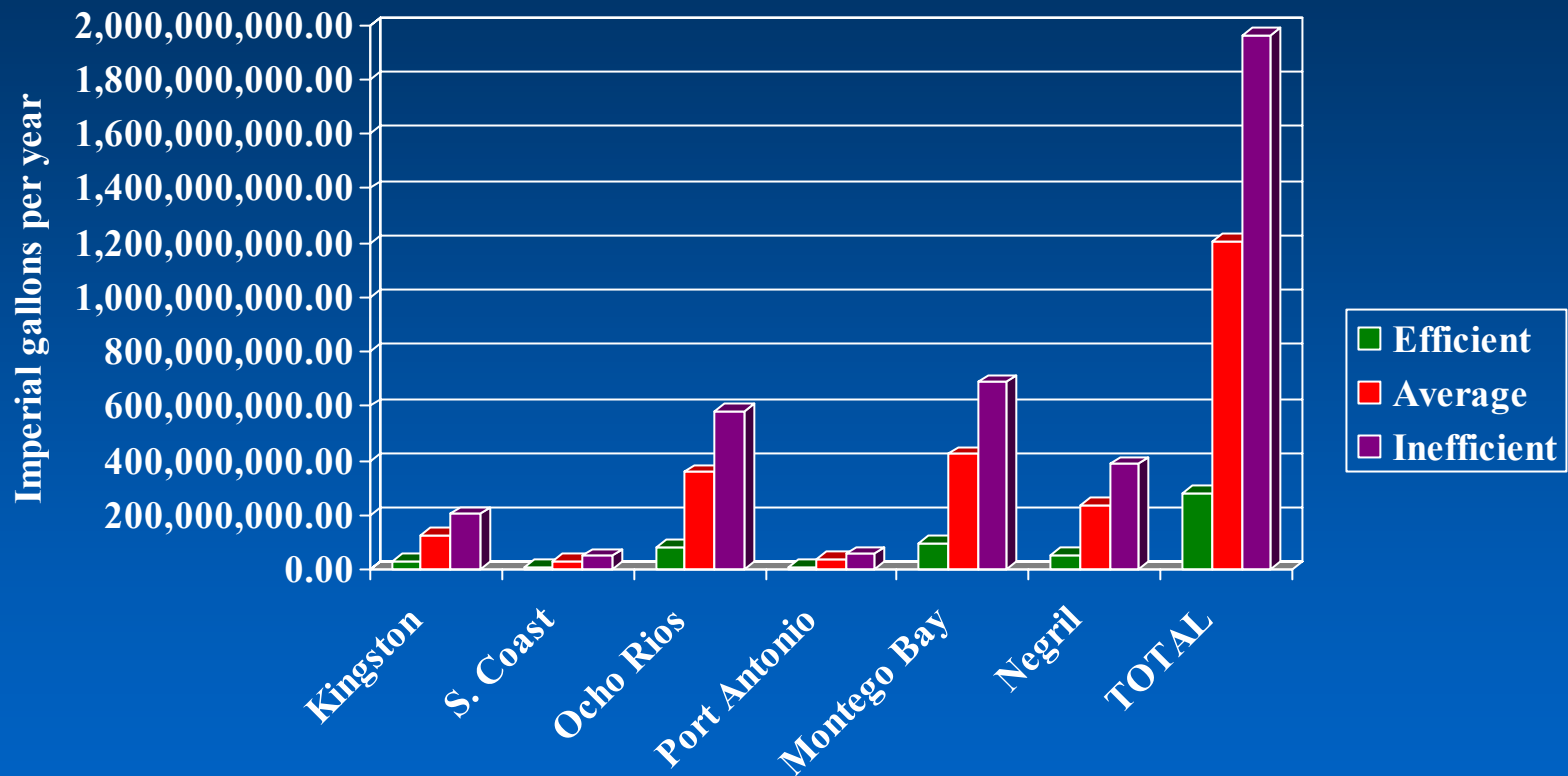
Water use: Green vs. average hotel



Electricity use: Green vs. average hotel

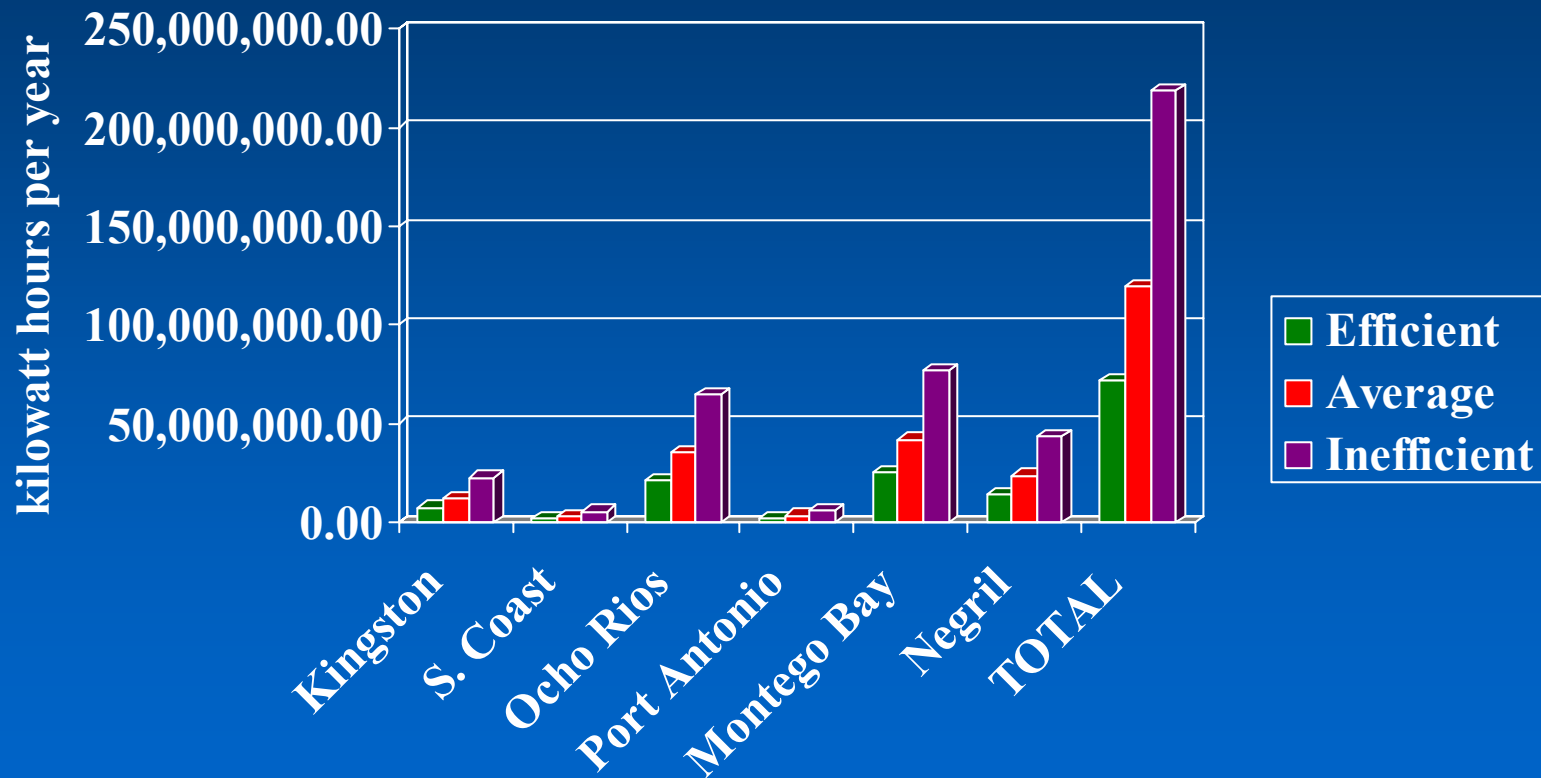


# Implications for Jamaica Hotel Industry (Water Use)



Based on 1996 TPDCo data, assuming 60% occupancy, and 2 persons per room

# Implications for Jamaica Hotel Industry (Energy Use)



Based on 1996 TPDCo data, assuming 60% occupancy, and 2 person per room